

KOROIKOVA, V.A.

21 (8)

Vsesoyuznyy nauchno-issledovatel'skiy tsentr
dlya izucheniya i razrabotki prikladnykh
yadernykh tekhnologiy
Trudy... Nauchno-issledovatel'skiy tsentr
dlya izucheniya i razrabotki prikladnykh
yadernykh tekhnologiy
All-Union Scientific Center for the Study and Development of Applied Nuclear Technologies
and Research in the National Economy and Technology
Scientific Center for the Study and Development of Applied Nuclear Technologies
Scientific Center for the Study and Development of Applied Nuclear Technologies
4,500 copies printed.

Sponsoring Agencies: USSR, Glavnoye upravleniye po ispol'tovaniyu
atomnoy energii, and Akademiya nauk SSSR.
Editorial Board of Sets: V.I. Pichukhin, Academician (Resp. Ed.), N.M.
Shumilovskiy (Deputy Resp. Ed.), Yu. S. Zaslavskiy (Deputy Resp.
Ed.), L.M. Tatchenko, B.I. Verkhovskiy, S.T. Mazurov, L.I. Petukhin
and N.G. Zeleninskaya (Secretary).

Ed. of Publishing House: P.M. Belyanin; Tech. Ed.: T.P. Polonova.
PURPOSE: This book is intended for specialists in the field of ma-
chine and instrument manufacture who use radioactive isotopes in
the study of materials and processes.

CONTENTS: This collection of papers covers a very wide field of the
utilization of tracer methods in industrial research and control
techniques. The topic of this volume is the use of radioisotopes
in the machine-instrument-manufacturing industry. The indi-
vidual papers discuss the application of radioisotope techniques
in the study of metals and alloys, problems of friction and lubri-
cation, metal cutting, engine performance, and defects in metals.
Several papers are devoted to the use of radioisotopes in the auto-
mation of industrial processes, recording and measuring devices, radi-
ation control, flowmeters, level gauges, safety devices, radi-
ation counters, etc. These papers represent contributions of ver-
tuous Soviet institutes and laboratories. They were published as
Transactions of the All-Union Conference on the Use of Radioiso-
topes and Stable Isotopes and Radiation in the National Economy
and Science, April 4-12, 1957. No personalities are mentioned.
References are given at the end of most of the papers.

Chernysheva, R.B. Method for Estimating the Degree of Degradation of Metals 108

Gulagov, B.B., Yu.P. Morozovskiy, L.M. Postnov, O.M. Mamitovskiy, Study of the Processes of Cast Formation in Hand Molds 112

Vitkin, A.L. (Vsesoyuznyy nauchno-issledovatel'skiy institut Chernoy Metallurgii - Central Scientific Research Institute of Ferrous Metallurgy). Study of the Mechanism of the Basic Process-
es in Hot Tin Plating 119

Jordan, G.G., and L.S. Furman (Nauchno-issledovatel'skiy institut tekhnicheskikh priborostroyeniya - Scientific Research Institute of Test-Power Instruments). Use of Nuclear Radiation for the Measurement of Heat-Power Parameters 124

Verkhovskiy, B.I., V.A. Borzakov, and V.Y. Yakubchik (Pishchetskiy institut imeni P. M. Lebedeva - Institute of Physics Imeni P.M. Lebedev, Academy of Sciences, USSR). Reduction of Errors in Measurements Performed With Scintillation Counters 127

Korotkova, V.A. (Pishchetskiy institut imeni P.M. Lebedeva - Institute of Physics, Academy of Sciences, USSR). Radiation in Analytical Methods 134

Afanas'yev, V.M. Automation of Measurements and Recording of Radioactive Radiation Intensity 140

Talichkin, V.G. Study of the Electrical Properties of Ionization Resistors 146

Regalin, V.G., and A.A. Rudakovskiy (Vsesoyuznyy nauchno-issledovatel'skiy institut dlya izucheniya i razrabotki tekhnicheskikh priborostroyeniya - Scientific Research Institute for Test-Power Instrument Making). Measuring the Drift of Machines 150

Jordan, G.G., and L.S. Furman (Nauchno-issledovatel'skiy institut tekhnicheskikh priborostroyeniya - Scientific Research Institute for Test-Power Instrument Making). Measuring the Drift of Liquids With Gamma Radiation 153

26-58-2-13/48

AUTHOR: Korotkova, V.A., Candidate of Physico-Mathematical Sciences

TITLE: Radio Isotopes in Scientific Experiments (Radioizotopy v nauchnom eksperimente) At the International Conference in Paris (Na mezhdunarodnoy konferentsii v Parizhe)

PERIODICAL: Priroda, 1958, Nr 2, pp 64-66 (USSR)

ABSTRACT: *Author expanded* At the International Conference on the Use of Radio Isotopes in Scientific Experiments, convened by the General Council of the UNESCO from 9-20 September, 1957, Professor A.A. Zhukovitskiy described an experimental method for simultaneous determination of the pressure of gases and their coefficient of diffusion, which would make it possible to calculate the thermodynamic characteristics of a solution, particularly of silver-copper and silver-lead. P.L. Gruzin dealt with interactions between atoms in alloys. L.A. Shvartsman described a method of studying the distribution of sulphur, phosphorus, chromium, tungsten and molybdenum among iron and slag by using tracer atoms. V.S. Vavilov reported the results of his study of the energy of ionization produced by β -particles in crystals of germanium, silicon, and also discussed the defects in single

Card 1/2

26-58-2-13/48

Radio Isotopes in Scientific Experiments. At the International Conference
in Paris

crystals of germanium caused by the action of β -particles and
fast neutrons. Other reports were read by non-Soviet scientists.
There are two Soviet references.

ASSOCIATION: Fizicheskiy institut imeni P.N. Lebedeva, Akademiya nauk SSSR,
Moskva (Physics Institute imeni P.N. Lebedev of the USSR Aca-
demy of Sciences, Moscow)

Card 2/2

1. Scientific research 2. Radio isotopes--Applications

ANDREYEV, G.S., kand. tekhn. nauk; BOKUCHAVA, G.V., kand. tekhn. nauk, dots.; BRAKMAN, L.A., inzh.; BUDNIKOVA, A.V., inzh.; GORDON, M.B., kand. tekhn. nauk, dots.; ZHAVORONKOV, V.N., inzh.; KARZHAVINA, T.V., kand. tekhn. nauk; KOROTKOVA, V.G., inzh.; KORCHAK, S.N., inzh.; KLUSHIN, M.I., kand. tekhn. nauk, dots.; KUZNETSOV, A.P., kand. tekhn. nauk, dots.; KURAKIN, A.V., inzh.; LATYSHEV, V.N., inzh.; OL'KHOVSKIY, V.N., inzh.; ORLOV, B.M., kand. tekhn. nauk, dots.; OSHER, R.N., inzh.; PODGORKOV, V.V., inzh.; ; SIL'VESTROV, V.D., kand. tekhn. nauk [deceased]; TIKHONOV, V.M., inzh.; TROITSKAYA, D.N., inzh.; KHRUL'KOV, V.A., inzh.; LESNICHENKO, I.I., red. izd-va; SOKOLOVA, T.F., tekhn. red.; GORDEYEVA, L.P., tekhn. red.

[Lubricating and cooling fluids and their use in cutting metals]
Smazochno-okhlazhdaiushchie zhidkosti pri rezanii metallov i
tekhnika ikh primeneniia. Moskva, Gos. nauchno-tekhn. izd-vo
mashinostroit. lit-ry, 1961. 291 p. (MIRA 15:1)
(Metalworking lubricants)

KOROTKOVA, V. M., inzh.; MONASTYRSKAYA, M. S., kand.tekhn.nauk, dotsent;
PAVLOV, S. A., doktor tekhn.nauk, prof.

Studying the reaction of hydrocellulose with carboxylated latexes.
Izv.vys.ucheb.zav.; tekhn.prom. no.4:38-44 '61.

(MIRA 14:10)

1. Moskovskiy tekhnologicheskoy institut legkoy promyshlennosti.
Rekomendovana kafedroy tekhnologii iskusstvennoy kozhi i plenkochnykh
materialov.

(Latex)

(Cellulose)

S/064/61/000/006/002/003
B110/B206

AUTHORS: Frolov, A. F., Korotkova, V. N.

TITLE: Equilibrium of the system liquid - vapor for mixtures of isoprene and hydrocarbons of the C₅ fraction

PERIODICAL: Khimicheskaya promyshlennost', no. 6, 1961, 6 - 8

TEXT: The separation of hydrocarbons of the C₅ fraction formed besides isoprene during dehydration of isopentane is difficult owing to the close vicinity of boiling points of the reaction products. It is the authors' aim to investigate the equilibrium of the system liquid - vapor of this mixture. Synthetic mixtures with α (3-methyl butene-1)-, β (2-methyl butene-2)-, and γ (2-methyl butene-1)-isoamylenes were investigated by PNY (RLU) refractometer (accuracy $\pm 2 \cdot 10^{-4}$) to determine the dependence of the refractive index n_D^{20} on the isoprene content. Since the isoprene determination in the isoprene-trans-1, 3-pentadiene mixture was impossible by means of the RLU refractometer owing to the close vicinity of the n-values,

Card 1/9

Equilibrium of the system...

S/064/61/000/006/002/003
B110/B206

given in Tables 2-5. The relative volatility α and the activity coefficients γ were determined from equations: $\alpha = \frac{y(1-x)}{x(1-y)}$ and $\gamma = (P \cdot y) / (P^0 \cdot x)$, where P = partial pressure of the component under experimental conditions, P^0 = pressure of the pure, saturated vapor of the component at experimental temperature, and x and y = molar concentrations of the component in vapor and liquid. The saturated pressures of pure vapors were taken from publications (Ref. 4: Fiziko-khimicheskiye svoystva individual'nykh uglevodorodov, pod redaktsiyey M. D. Tilicheyeva, vyp. 3, Gostoptekhizdat, 1951). The activity coefficients of the hydrocarbons investigated were close to 1 (Tables), which indicates the ideality of the system and its conformance with Raoult's law over a great concentration range. The method by I. N. Bushmakina and Ye. D. Voyeykova (ZhOKh, 10, 1615 (1949)) was used for a more accurate qualitative checkup of the experimental results. The points of the curves $\alpha = f(x)$ for the hydrocarbons investigated lay on a straight line, which also indicates conformance with Raoult's law. There are 2 figures, 5 tables, and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Ref. 2: Ind. Eng. Chem., 49, no. 3, 414 (1957).

Card 3/9

Card 4/9

S/079/60/030/009/007/015
B001/B064

AUTHORS: Petrov, K. A., Bliznyuk, N. K., Korotkova, V. P.

TITLE: Reaction of the Acid Chlorides of Phosphoric Acid and Alkyl Phosphinic Acids With Alkyl Magnesium Bromides ^η

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 9,
pp. 2995-2999

TEXT: Proceeding from the papers of Refs. 1-6 that deal with the smooth formation of the trialkyl phosphine oxides from phosphorus oxychloride and organo-magnesium compounds (Scheme 1), the authors tried to increase the yields of dialkyl phosphinic acids. They showed that the reaction of the acid chlorides of the pentavalent phosphoric acids with alkyl magnesium bromides does not come to an end, and found the reasons why. Also in the case of longer boiling of the acid chloride with excess organo-magnesium compound a certain amount of dialkyl phosphinic acid forms besides phosphine oxide. The yield of the mentioned acid increases considerably if alkyl magnesium halides of isostructure are used. Thus, according to Ref. 1 the reaction of phosphorus oxychloride with n-butyl

Card 1/3

Reaction of the Acid Chlorides of Phosphoric
Acid and Alkyl Phosphinic Acids With Alkyl
Magnesium Bromides

S/079/60/030/009/007/015
B001/B064

magnesium bromide gives rise to 50-60% tri-n-butyl phosphine oxide and 15-25% di-n-butyl phosphinic acid. Under the same conditions, except for the use of isobutyl magnesium bromide, the oxide yield is reduced to 25-30%, and that of the acid increased to 30.5%. Apparently, the authors of Ref. 1 regarded the mixture of trialkyl phosphine oxide and dialkyl phosphinic acid as pure oxide. The formation of considerable amounts of dialkyl phosphinic acids besides the oxides in the Grignard reaction may be explained by the fact that the intermediate products (the chloro phosphonates) react with magnesium halides and pass over into the complexes $R_2P(O)Cl \cdot MgXCl$ that are insoluble in ether and which in turn react difficultly under heterogeneous conditions with the alkyl magnesium halides. This circumstance permits stopping most of the reaction during the intermediate stage and thus to obtain the dialkyl phosphinic acids and their derivatives. On treating phosphorus oxychloride or the acid dichloride of methyl phosphinic acid with alkyl magnesium bromides, in the molar ratio 1 : 2 and 1 : 1, with subsequent hydrolysis, dialkyl phosphinic acids were obtained in approximately the same yields as in the blocking

Card 2/3

Reaction of the Acid Chlorides of Phosphoric
Acid and Alkyl Phosphinic Acids With Alkyl
Magnesium Bromides

S/079/60/030/009/007/015
B001/B064

of the chlorine atom with pyridine (Ref. 6) (Scheme 2). On treating the above complex with alcohol in the presence of triethyl amine the ester of dialkyl phosphinic acid is obtained in good yields (Scheme 3). The reaction of alkyl dichloro phosphates and acid chloride esters of methyl phosphinic acid with Grignard reagents gave rise to esters of dialkyl phosphinic acids (Table) (Scheme 4). There are 1 table and 7 references: 1 Soviet, 5 US, and 1 German.

SUBMITTED: August 13, 1959

Card 3/3

27508

S/079/61/031/009/009/012
D215/D306

15-8150

1372, 2209, 2409

AUTHORS: Petrov, K.A., Gavrilova, A.I., Shatunov, V.K., and
Korotkova, V.P.

TITLE: Diethyleneimides of β -aminoethylphosphinic and
thiophosphinic acids. II

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 9, 1961,
.3076 - 3081

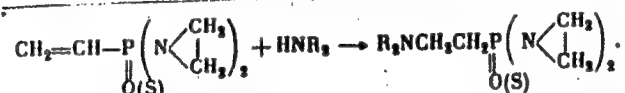
TEXT: The present work is a continuation of an earlier work, in which the authors showed that diethyleneimidovinylphosphonates and vinylthiophosphonates as well as esters of vinylphosphinic acid form addition compounds with mercaptans and alcohols to form corresponding ethyleneimides of alkylphosphinic and alkylthiophosphinic acids. In continuing the investigations, the authors studied the addition of secondary and primary amines to diethyleneimides of vinylphosphinic and vinylthiophosphinic acids. The amines used were diethylamine, ethyleneimine, piperidine, morpholine, dibenzy-

Card 1/3

27508
S/079/61/031/009/009/012
D215/D306

Diethyleneimides of ...

amine and allylamine; they were found to add to imides of vinylphosphinic and vinylthiophosphinic acids to form imides of β -aminoethylphosphonates and thiophosphonates, according to the following reaction:



Diethylamine, piperidine and ethyleneimine readily combine at room temperature over a period of 1.5-2. days or at 40-50°C. for 4-5 hrs. Dibenzylamine and allylamine react in the presence of catalytic quantities of sodium alcoholate. In all cases it is advisable to use equimolecular quantities without a solvent. Addition of amines to the imides of the acids is more difficult than in the case of the addition of amines to neutral esters of the acids. The addition products of piperidine, morpholine and diethylamine with the imides of the acids were purified by vacuum distillation (10-4 mm); the products of the other amines decomposed on distilling. All di-

Card 2/3

27508

S/079/61/031/009/009/012
D215/D306

Diethyleneimides of ...

ethylene-imides of aminophosphonates and aminothiophosphonates were viscous, colorless liquids, soluble in benzene, chloroform, ether and alcohol and are stable at temperatures below 0°C. Prolonged storing at room temperature results in gradual polymerization which is due to the opening of the ethyleneimide rings and results in the production of linear polymers either without a phosphorus residue or with the phosphorus residue binding the main chains of the macromolecule. The compounds which were prepared and their properties are summarized in tabulated form. Preparation of compounds 1-7 and 9 was conducted at room temperature and of compounds 8, 10, and 11 at 80°C in the presence of sodium ethoxide. There are 2 tables and 3 Soviet-bloc references.

SUBMITTED: September 5, 1960

X

Card 3/3

27509

S/079/61/031/009/010/012
D215/D306

15-8150

AUTHORS: Petrov, K.A., Gavrilova, A.I., Shatunov, V.K., and
Korotkova, V.P.

TITLE: Diethyleneimides of alkyl- and alkenylthiophosphinic
and phosphinic acids. I

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 9, 1961,
3081 - 3085

TEXT: The authors studied the properties of diethyleneimides of
alkyl- and alkenylthiophosphinic and allylphosphinic acids, and
investigated the addition of mercaptans and alcohols to diethylene-
imides of vinylphosphinic and vinylthiophosphinic acids. Their aim
was to prepare imidophosphonates and thiophosphonates containing
ether and thioether groups in a radical bonded with phosphorus
through carbon. Diethyleneimides of alkyl- and alkenylthiophosphi-
nic and allylphosphinic acids were prepared by reacting the corres-
ponding acid chlorides with ethyleneimine in dry benzene or ether

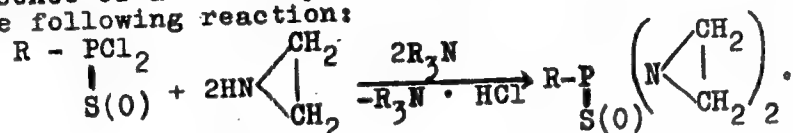
Card 1/3

27509

S/079/61/031/009/010/012
D215/D306

Diethyleneimides of alkyl- ...

in the presence of a tertiary base (HCl acceptor) at 5-10°C according to the following reaction:



The products were colorless liquids, readily soluble in water and organic solvents; some of them crystallized on prolonged standing. Almost all the compounds distilled in vacuum, the one exception being the diethyleneimide of β -chloroethylthiophosphinic acid which polymerizes at 100-102°C and 10⁻⁴mm pressure probably due to HCl splitting off which initiates spontaneous polymerization. The properties and yields of some of the prepared phosphinates and thiophosphinates are given in tabulated form. Diethyleneimides of vinylphosphinic and thiophosphinic acids form addition products with mercaptans and alcohols. With mercaptans the reaction occurs at 60°C and is complete in 14-15 hrs. or less if catalytic quantities of sodium alcoholate is present. Ethylmercaptan adds more

Card 2/3

PETROV, K.A.; GAVRILOVA, A.I.; KOROTKOVA, V.P.

Allylamides and ethyleneimides of phosphoric, phosphinic, and
phosphorous acids. Zhur.ob.khim. 32 no.3:915-920 Mr '62.
(MIRA 15:3)
(Phosphorus acids)

PETROV, K.A.; GAVRILOVA, A.I.; KOROTKOVA, V.P.

Reactions of diethyleneimides of vinylphosphinic acid with dialkyl
phosphites. Zhur.ob.khim. 32 no.6:1978-1981 Je '62. (MIRA 15:6)
(Phosphinic acid) (Phosphorous acid)

KOROTKOVA, V. P.

USSR/Medicine - Virus Diseases, Influenza

Mar 53

"Etiology and Laboratory Diagnosis of Influenza," A. A. Smorodintsev, N. S. Klyachko, T. Ya. Luzyanina, M. A. Morozenko, Ye. S. Shikina, I. A. Yuras, V. P. Korotkova, Div of Virology, Inst of Exptl Med, Acad Med Sci USSR; Inst of Epidemiol imeni Pasteur

"Zhur Mikrobiol, Epidemiol, i Immunobiol" No 3, pp 69-78

At present, the subtype A₁ predominates in the USSR. The antigenic structure of A₁ isolated during the past few years is polymorphic: it is necessary to supplement cross-neutralization by cross-adsorption of antibodies according to a new method developed by the authors. Smorodintsev's rapid method of diagnosing influenza by the reaction of complement fixation is effective in 50% of the cases on sputum examined during the first week after infection; it is less effective on serum. The reaction of hemoagglutination is effective in 40% of the cases when carried out under proper conditions with the use of human erythrocytes of the O group. It is necessary to produce and supply diagnostic preparations [literally "diagnostica"] equally suitable for hemoagglutination and complement fixation (dry A, A₁, and B diagnostica from eluates or infected chicken embryos); to provide dry purified anti-influenza horse sera suitable for both hemoagglutination and complement fixation; to supply from a central point through donor stations, human O-erythrocytes.

PA 244T44

KOROTKOVA, V. P. Cand Biol Sci -- (diss) "Data ^{for} Concerning the
^{prevention} ^{treatment}
~~Prophylaxis~~ and ~~Therapy~~ of Experimental Influenza Infection."

Len, 1957. 15 pp 20 cm. (Academy of Medical Sciences USSR,

Inst of Experimental ~~XX~~

^{From the} ^(inst of Exp Med, Acad Med Sci USSR)
Medicine, ~~Department of Virology~~), 200 copies (KL, 26-57, 106)

- 31 -

KOZHINA, I.S., KOROTKOVA, V.P.

Effect of certain preparations made from the leaves of *Eucalyptus*
viminialis on the influenza virus [with summary in English].
Antibiotki 3 no.4:41-46 J1-Ag '58 (MIRA 11:10)

1. Institut eksperimental'noy meditsiny AMN SSSR (Leningrad)
(VIRUSES, EFFECT OF DRUGS ON)
(EUCALYPTUS)
(INFLUENZA)

L1623

S/205/62/002/005/010/017
D268/D308

27.1220

AUTHORS: Stashkov, A.M., and Korotkova, V.P.

TITLE: The reflection in EEG of functional disturbances in the central nervous system under irradiation and sympathectomy

PERIODICAL: Radiobiologiya, v. 2, no. 5, 1962, 719 - 725

TEXT: In continuation of earlier work, EEG analyses were made of changes in the functional condition of the central nervous system in rabbits, 53 of which had the superior cervical sympathetic ganglions removed, followed by x ray irradiation (at 1,000 r) 1, 4 and 8 weeks later. EEG of 27 controls were also carried out. The results showed irreversible EEG changes in the form of a persistent depression of the amplitude of the biological current in the cortex and hypothalamic region in animals subjected to sympathectomy, a similar phenomenon being noted in intact animals. No pathological EEG changes were noted in intact rabbits given mercamine at 150 mg/kg intra-abdominally. It is suggested that the sympathetic nervous system participates in the protective chemical reactions to irradiation.
Card 1/2

The reflection in EEG of ...

S/205/62/002/005/010/017
D268/D308

tion, and that the protective activity of mercamine is disrupted following the removal of the superior cervical sympathetic ganglions. There are 5 figures and 15 references.

ASSOCIATION: Institut eksperimental'noy meditsiny AMN SSSR, Leningrad (Institute of Experimental Medicine, AMS USSR, Leningrad)

SUBMITTED: October 30, 1961

Card 2/2

ARBUZOV, S.Ya.; STASHKOV, A.M.; KOROTKOVA, V.P.

Effect of ionizing radiations and certain chemical protective
agents on physical endurance in animals. Farm. i tcks. 23

no. 5:459-464 S-0 '60.

(MIRA 13:12)

1. Otdel radiobiologii (zav. - prof. S.Ya. Arbuzov) Institut
eksperimental'noy meditsiny AMN SSSR.

(RADIATION—PHYSIOLOGICAL EFFECT)

(RADIATION PROTECTION)

ARBUZOV, S.Ya.; STASHKOV, A.M.; KOROTKOVA, V.P.

Comparative data on the protective and therapeutic effect of the
derivatives of diamides of imidazoledicarboxylic acids in radiation
injury. Radiobiologiya 1 no.3:385-393 '61. (MIRA 14:10)
(IMIDAZOLEDICARBOXYLIC ACID)
(RADIATION PROTECTION)

KOROTKOVA, V.P.; STASHKOV, A.M.

Chemical prophylaxis of radiation injuries in different species
of animals. Radiobiologiya 2 no.6:903-906 '62 (MIRA 16:11)

1. Institut eksperimental'noy meditsiny AMN SSSR, Leningrad.

*

KOROTKOVA, V.P.

AID Nr. 996-10 24 June

QUANTITATIVE DEPENDENCE OF PROTECTIVE ACTIVITY OF "ANTI-FEINS" ON THE IRRADIATION DOSE (USSR)

Stashkov, A. M., and V. P. Korotkova. Radiobiologiya, v. 3, no. 2, 1963, 281-285.
S/205/63/003/002/020/024

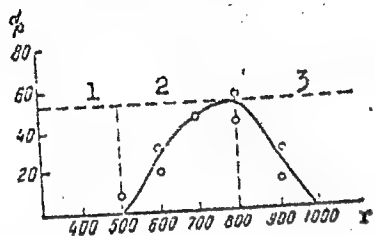
White rats weighing 200 to 240 g were irradiated with 500 to 1000 r from an PYM-11 apparatus (180 kv, 15 ma; filters, 1 mm Al and 0.5 mm Cu; distance,

Card 1/3

ATD Nr. 996-10 24 June

QUANTITATIVE DEPENDENCE OF PROTECTIVE ACTIVITY [Cont'd]

S/205/63/003/002/020/024



Changes in the protective effect of allylnorantifein with x-irradiation doses ranging from 500 to 1000 r.

1 - refractory phase; 2 - activation phase; 3 - depression phase

antifein increased the survival rate by 36%, ethylnorantifein by 33%, and allylnorantifein by 55%. With increased irradiation doses the protective effect of the preparations decreased and finally disappeared. Injection of allylnorantifein 30 min before total-body irradiation with 800 r increased the survival

Card 2/3

AID Nr. 996-10 24 June

QUANTITATIVE DEPENDENCE OF PROTECTIVE ACTIVITY [Cont'd]

S/205/63/000/002/020/024

rate of the animals (53% with a dose of 25 mg/kg, and 33% with a dose of 50 mg/kg). With an irradiation dose of 800 r the effectiveness of allylnorantifein (25 mg/kg) decreased to 29%; with a dose of 50 mg/kg it was ineffective. With an irradiation dose of 800 r the preparations (derivatives of diamides of imidazoldicarboxylic acids) increased the life span of the rats to 12 days on the average, as compared with 8 to 9 days of the controls. The life span of the test animals subjected to 500 r was similar to that of the controls (14 days). The data obtained indicate that the protective effect of a group of chemical compounds depends on the irradiation dose; it increased with increasing irradiation dose to a certain optimum level, and decreased when the irradiation dose deviated from the optimum level (either higher or lower). The preparations are most effective against irradiation doses when the mortality rate in the control group ranges from 50 to 80% (i. e., about 800 r). They are least effective or ineffective against low radiation doses.

[SGM]

Card 3/3

L 13329-63

ENT(1)/ENT(m)/BDS

AFFTC/AMD/ASD AR/K

8/0205/63/003/004/0603/0611

ACCESSION NR: AP3003939

57
56

AUTHOR: Korotkova, V. P.; Ryzhkov, V. Ye.; Stashkov, A. M.

TITLE: Change in the concentration of 17-oxycorticosteroids and hematological indices in dogs after the application of certain chemical protective means and irradiation | 9

SOURCE: Radiobiologiya, v. 3, no. 4, 1963, 603-611

TOPIC TAGS: radiation sickness, ACTH, 17-oxycorticosteroid, adrenocorticotrophic hormone, mercamine, adrenal cortex, antiradiation treatment

ABSTRACT: The pathogenesis and chemical prophylaxis of radiation damage in dogs have been investigated on the basis of functional changes in the adrenal cortex. Several days after an absolute lethal dose (700 r), the concentration of 17-oxycorticosteroids in the peripheral blood plasma first exhibited a decrease, then a buildup, and finally in the terminal period a leveling off above normal. The immediate reaction of the adrenal cortex to the introduction of ACTH was to remain normal throughout all stages of radiation sickness, indicating the retention of reserve powers. The decrease in the concentration of 17-oxycorticosteroids in animals whose suprarenal glands have been screened against irradiation was

Card 1/2

L 13329-63

ACCESSION NR: AP3003939

not as pronounced as in the case of unshielded animals. The reaction to ACTH in the case of the former remained within normal bounds. No substantial differences were observed in the concentration of 17-oxycorticosteroids in animals who had received mercamine (75 mg/kg) and "antifein" (15 mg/kg); the reaction to ACTH in these cases was more pronounced. The results indicate the participation of the hypophysis-adrenal cortex system in the pathogenesis and pharmacological prophylaxis of radiation damage. It is concluded that a change of eosinophils after the introduction of ACTH cannot be used in the evaluation of the functional condition of the adrenal cortex. Orig. art. has: 1 table and 4 figures.

ASSOCIATION: Institut eksperimental'noy meditsiny* AMN SSSR (Institute of Experimental Medicine, AMN SSSR)

SUBMITTED: 21Jul62

DATE ACQ: 15Aug63

ENCL: 00

SUB CODE: AM

NO REF SOV: 021

OTHER: 025

Card 2/2

L 10116-63

EWI(1)/EWI(m)/BDS/ES(b) AFFTC/ASD K

ACCESSION NR: AP3000260

S/0241/63/003/005/0079/0082

AUTHOR: Stashkov, A. M.; Korotkova, V. P. (Leningrad)

TITLE: Protective and therapeutic effects of the synergistic action of effective substances on radiation sickness in animals

SOURCE: Meditsinskaya radiologiya, no. 5, 1963, 79-82

TOPIC TAGS: radiation sickness, cystamine, purine, pyrimidine compounds, pyridoxin, narcotic drugs, protective effects

TEXT: The effect of various combinations of cystamine, purine and pyrimidine compounds, pyridoxin (vitamin B sub 6), and narcotic drugs on radiation sickness in animals was studied for 30 days in white mice (male) weighing 18 to 20 g. The animals were subjected to x-irradiation with 700 r from an RUM-11 apparatus at 41.4 r/min. The highest protective effect was obtained by an intraperitoneal injection of 150 mg/kg cystamine 30 min before exposure, followed by a subcutaneous injection of 50 mg/kg antifein immediately after exposure (56% survival rate). An injection of 150 mg/kg cystamine

Card 1/2

L 10116-63

ACCESSION NR: AP3000260

0

30 min before exposure followed by an injection of 50 mg/kg antifein immediately after exposure and intraperitoneal injections of vitamin B(1 mg/kg) for seven consecutive days after exposure resulted in a 60% survival rate. The narcotic drug barbamy1 (100 mg/kg) inhibited the effect of antifein (20% survival rate), whereas chloral hydrate (also a narcotic drug), injected in a dose of 300 mg/kg immediately after exposure, increased the protective effect of antifein (100 mg/kg), resulting in a 58% survival rate. The data obtained indicate that the effectiveness of the preparations used depends on their chemical nature, dose, time, and sequence of administration. Activation and inactivation of the protective substances may occur simultaneously in the animal organism. Orig. art. has: 3 tables.

ASSOCIATION: none

SUBMITTED: 0029

DATE ACQ: 12Jun53

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

Card 2/2

ACCESSION NR: AP4043218

S/0205/64/004/004/0594/0598

AUTHOR: Korotkova, V. P.; Stashkov, A. M.

TITLE: Role of the adrenals in reactions to radiation with the use of radioprotective chemicals

SOURCE: Radiobiologiya, v. 4, no. 4, 1964, 594-598

TOPIC TAGS: radiation protection, adrenal gland, immunology, mouse, rat, adrenalectomy, endocrinology, mercamine, antifein

ABSTRACT: The role of the adrenal glands in radiation sickness has been demonstrated by many authors. However, few studies have been undertaken to determine the mechanism of the adrenals associated with chemical prophylaxis against radiation sickness. To investigate this, mice (18—22 g) and rats (180—200 g) were lightly anesthetized, and both adrenals were removed through the lumbar region. Mice were exposed to 700—800-r whole body radiation while rats received 600—800 r from the 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 13th, and 30th day following adrenalectomy. Mercamine was intraperitoneally administered to both experimental and control animals 30 min prior

Card 1/2

STASHKOV, A.M.; KOROTKOVA, V.P.

Radioprotective properties of pharmacological preparations with
neurotropic effect from the antifeine group. Farm. i toks. 27
no.1:73-76 Ja-F '64. (MIRA 17:11)

1. Otdel radiobiologii (zav. - prof. S.Ya. Arbuzov) Instituta
eksperimental'noy meditsiny AMN SSSR.

KOROTKOVA, V.S., inzh.; ZAYTSEVA, V.A., starshiy tekhnik

Methods of evaluating the printing properties of paper.
Bum.prom. 35 no.3:13-15 Mr '60. (MIRA 13:6)

1. Kontrol'no-tekhnicheskaya laboratoriya Moskovskoy tipografii
"Gosnak".
(Paper) (Printing)

KOROTKOVA, Ye.

Present situation in the tea market [with summary in English, p.31-32]
Vnesh.torg. 26 no.6:16-21 Je '56. (MIRA 9:9)
(Tea trade)

BEKMUKHMETOV, Yerkebulat Bekmukhametovich; PONOMAREV, V.D.,
akademik, otv. red.; KOROTKOVA, Ye.A., red.

[Nonferrous metallurgy and mining in prerevolutionary
Kazakhstan] TSvetnaya metallurgiya i gornoe delo dore-
voliutsionnogo Kazakhstana. Alma-Ata, Izd-vo AN Kaz.SSR,
1964. 314 p. (MIRA 17:5)

1. Akademiya nauk Kazakhskoy SSR (for Ponomarev).

KOROTKOV, Ye. A.

SIMORIN, Aleksey Mikhaylovich; BYKOVA, M.S., kandidat geologo-mineralogicheskikh nauk, otvetstvennyy redaktor; KOZLOVA, I.V., redaktor; KOROTKOVA, Ye.A., redaktor; BOROZINA, Z.P., tekhnicheskiy redaktor

[Stratigraphy and Brachiopoda of the Karaganda Basin] Stratigrafiia i brachiopody Karagandinskogo basseina. Alma-Ata, Izd-vo Akademii nauk Kazakhskoi SSR, 1956. 299 p. (MIRA 10:1)
(Karaganda Basin--Brachiopoda, Fossil)

KUZNETSOVA, Zoya Vladimirovna; GLADYSHEVA, Ye.N., kand.geograf.nauk,
otv.red.; KOROTKOVA, Ye.A., red.; MOROKINA, Z. P., tekhn.red.

[Pavlodar Province; economic and geographical characteristics]
Pavlodarskaia oblast'; ekonomike-geograficheskaiia kharakteristika.
Alma-Ata, Izd-vo Akad. nauk Kazakhskoi SSR, 1958, 179 p.

(MIRA 12:1)

(Pavlodar Province--Economic conditions)

PAL'GOV, Nikolay Nikitich; KOROTKOVA, Ye.A., red.; ROROKINA, Z.P.,
tekhn.red.

[Rivers of Kazakhstan; a study in physical geography]
Reki Kazakhstana; fiziko-geograficheskii ocherk. Alma-Ata,
Izd-vo Akad.nauk Kazakhskoi SSR, 1959. 97 p. (MIRA 12:6)
(Kazakhstan--Rivers)

GLADYSHEVA, Yekaterina Nikolayevna; SEMENOVA, M.I., otv.red.; KOROTKOVA,
Ye.A., red.; GASHINA, Ye.A., tekhn.red.

[North Kazakhstan Province; economic and geographical characteristics]
Severo-Kazakhstanskaya oblast'; ekonomiko-geograficheskaya kharakte-
ristika. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1959. 184 p.
(MIRA 12:11)

(North Kazakhstan Province--Economic conditions)

BARBOT DE MARNI, Arseniy Viktorovich, kand.geologo-mineral.nauk; BOK,
I.I., otv.red.; KOROTKOVA, Ye.A., red.; SHEVCHUK, T.I., red.;
ALFEROVA, P.F., tekhn.red.

[Deposits of basic building materials in northern Kazakhstan
(in regions of virgin and waste lands); explanatory notes,
cadastral survey, and a map] Nestorozhdeniia osnovnykh stroi-
tel'nykh materialov v severnoi chasti Kazakhstana (v raionakh
tsel'nykh i selskikh zemel'); ob"iasnitel'naia zapiska i
kadastr s kartoi. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR,
1960. 375 p. (MIRA 13:5)

(Kazakhstan--Building materials)

SEMENOVA, Margarita Ivanovna; POPOLZIN, A.G., kand. geogr. nauk, otv. red.
KOROTKOVA, Ye.A., red.; PROKHOROV, V.P., tekhn. red.; ALFEROVA, P.F.,
tekhn. red.

[Dzhambul Province; nature, population and economy] Dzhambul'skaia
oblast'; priroda, naselenie i khoziaistvo. Alma-Ata, Izd-vo Akad.
nauk Kazakhskoi SSR, 1961. 216 p. (MIRA 14:7)
(Dzhambul Province--Geography)

SYROMYATNIKOV, Nikolay Grigor'yevich; NOVOKHITSKIY, I.P., otv. red.;
KOROTKOVA, Ye.A., red.; BOROKINA, Z.P., tekhn. red.

[Migration of uranium, radium, and thorium isotopes and
interpretation of radioactive anomalies] Migratsiya izoto-
pov urana, radiia i toria i interpretatsiya radioaktivnykh
anomalii. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1961. 77 p.
(MIRA 15:2)

(Radioactive prospecting) (Uranium ores)

KUZNETSOVA, Zoya Vladimirovna; KURITSYN, Igor' Ivanovich; OSORGIN, A.V., retsenzent; NAZARENKO, I.M., retsenzent; GLADYSHEVA, Ye.N., otv. red.; POPOVA, G.Z., otv. red.; KOROTKOVA, Ye.A., red.; ALFEROVA, P.F., tekhn. red.

[Semipalatinsk Province; economic and geographical features]
Semipalatinskaya oblast'; ekonomiko-geograficheskaya kharakteristika. Alma-Ata, Izd-vo AN KazSSR, 1961. 213 p.

(MIRA 15:7)

(Semipalatinsk Province—Economic geography)

SADYKOV, Anil' Mirzagainovich; BORUKAYEV, R.A., akademik, otv. red.;
KOROTKOVA, Ye.A., red.; BRAILOVSKAYA, M.Ya., red.;
BOROKINA, Z.P., tekhn. red.

[Middle Paleozoic bivalve mollusks in the Atasu region (central Kazakhstan)] Srednepaleozoiskie dvustvorchatye molliuski Atasu; Tsentral'nyi Kazakhstan. Alma-Ata, Izd-vo Akad. nauk Kazakhskoi SSR, 1962. 98 p. (MIRA 16:2)

1. Akademiya nauk Kazakhskoy SSR (for Borukayev).
(Atasu region--Mollusks, Fossil)

MATYSHUK, Igor' Vladimirovich; ZYKOV, D.A., akademik, otv. red.;
KOROTKOVA, Ye.A., red.; KHUDYAKOV, A.G., tekhn. red.

[Tillage and fertility of Chestnut soils in central Kazakhstan]
Obrabotka i plodorodie kashtanovykh pochv TSentral'nogo Kazakh-
stana Alma-Ata, Izd-vo Akad. nauk Kazakhskoi SSR, 1962. 164 p.
(MIRA 15:12)

1. Akademiya nauk Kazakhskoy SSR (for Zykov).
(Kazakhstan—Soils)

BORUKAYEV, R.A., akademik, red.; KOROTKOVA, Y e.A., red.; BRAILOVSKAYA, M.Ya., red.; IVSHIN, N.K., kand.geol.-mineral.nauk, zamestitel' red.; KHUDYAKOV, A.G., tekhn.red.

[Areal geology; geology of the Chingiz geanticlinal zone (central Kazakhstan)]--Regional'naya geologiya; geologiya Chingizskoi geoantiklinoronoï zony (TSentral'nyi Kazakhstan). Alma-Ata, Izd-vo Akad. nauk Kazakhskoi SSR, 1962. 165 p. (Akademiia nauk Kazakhskoi SSR, Alma-Ata. Institut geologicheskikh nauk. Trudy, vol.5). (Kazakhstan--Geology) (MIRA 16:2)

KOROTKOVA, Ye.I.

Developmental dynamics of the Askaniya-Nova Preserve fescue-stipa
steppe as related to weather condition. Bot.zhur. 42 no.6:889-902
Je '57. (MIRA 10:7)

1. Botanicheskiy institut imeni V.L. Komarova Akademii nauk SSSR,
Leningrad.

(Askaniya-Nova preserve--Steppe flora)

UGAY, Ya.A.; KOROTKOVA, Ye.I.

Interaction between copper and zinc under nonequilibrium conditions. Trudy VGU 57:31-37 '59. (MIRA 13:5)
(Copper) (Zinc)

DAVIDSON, A.G.; DATLIN, S.V.; KIRICHENKO, G.A.; KOROTKOVA, Ye.N.;
KRAVCHENKO, D.V.; ORLOVA, A.S.; ADADUROVA, A.A.; ARKAD'YEV,
V.G.; BARDINA, Yu.Ya.; BODYANSKIY, V.L.; BONDAREV, S.N.;
GLAZACHEV, M.V.; DAVIDOVA, E.A.; IVANOV, V.N.; KARPUSHINA,
V.Ya.; KREKOTEN', L.P.; LANDA, R.G.; LEVITSKAYA, G.O.; LIFETS,
Yu.G.; LOGINOVA, V.P.; ONAN, E.S.; PEGUSHEV, A.M.; PYKHUNOV,
N.V.; TOKAREVA, Z.I.; KHUDOLEY, V.F.; MILOVANOV, I.V., red.;
MIKAELIAN, E., red.; MUKHIN, R., red.; SVANIDZE, K., red.;
KLIMOVA, T., ~~tekst.~~ red.

[Africa today; concise reference book on politics and economic
conditions] Afrika segodnia; kratkii politiko-ekonomicheskii
spravochnik. Moskva, Gos. izd-vo polit. lit-ry, 1962. 326 p.

(Africa--Politics)

(Africa--Economic conditions)

KIRICHENKO, G.A., kand.ekonom.nauk; KOROTKOVA, Ye.N.

"The raw material resources of Africa, 1913-1958" by A.IU.Shpirt.
Reviewed by G.A.Kirichenko, E.N.Korotkova. Vest.AN SSSR 33
no.2:134-136 F '63. (MIRA 6:2)

(Africa—Raw materials)
(Shpirt, A.IU.)

held at the vocational-technical schools. The Saratov Technical School Nr 4 already has some experience in this field. There has been an evening class department for training electricians, crane and refrigerating plant operators, stokers and workers in other trades for the past 3 years. Evening class departments already exist at the Technical School Nr 5 for Cement Workers in Vol'sk and Technical School Nr 3 in Saratov. Such departments could be opened at Technical School Nr 35 for sewing industry workers in Saratov, and at Technical School Nr 37 for electricians in Marks. In order to train girls in

Card 1/2

A Broader Road to Vocational Evening Classes

SOV/27-59-2-7/30

vocational-technical schools, the number of professions taught should be increased. The present form of State aid for students at vocational-technical schools should be revised. Schools should be placed on a partial self-supporting basis by expanding production of apprentice workshops. Mechanization schools could easily accept orders from kolchozes and sovkhozes for tractor and combine repair, etc. The author stresses the need for supplying the schools with highly qualified craftsmen and instructors and for better organized brigade and individual training in the plants and factories.

ASSOCIATION: Saratovskoye oblastnoye upravleniye trudovykh rezervov
(Saratov Oblast' Administration of Labor Reserves).

Card 2/2

KOROTNEV, S.

Closer to the demands of life. Prof.-tekh.obr. 17 no.3:10 Mr
'60. (MIRA 13:6)

1. Nachal'nik Saratovskogo oblastnogo upravleniya professional'no-
tekhnicheskogo obrazovaniya.
(Saratov Province--Technical education)

KOROTNYAN, V. S.; ERSNON, R. A.

Efficient network systems within a collective farm taking
into account the future increase in consumers' needs. Izv.
AN Mold. SSR no.9:17-23 '62. (MIRA 16:1)

(Moldavia—Rural electrification)

KOROTONOSHKO, N. I. Cand. Tech. Sci.

Dissertation: "Investigation of the Motion of an Automotive Vehicle with Two Driving Axles and Blocked Drive." Sci Res Automobile and Automotive Inst - "NAMI" 2 Jul 47.

SO: Vechernyaya Moskva, Jul, 1947 (Project #17836)

KOROTKOSHKO, N. I.

21974 SHEBALI", Yu. A. i KOROTKOSHKO, N. I.

Otechestvennyy parevoy Avtomobil' IAMI-012.
Avtomob. Prom-st', 1949, No. 7, s. 13-17.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949

Testing Vami-012 Steam-driven motor vehicle. Korotonoshko, M. (Avtemobil (Auto-
mobile), June 1951, 22-23.

immediate source clipping

KOROTONOSHKO, N. I.

USSR/Miscellaneous - Books

Card 1/1 : Pub. 12 - 11/12

Authors : Korotonoshko, N. I.; Kulikov, N. K.; Khanin, N. S.; Tarutin, A. A.;
 and Rutenberg, G. M.

Title : Critique and bibliography

Periodical : Avt. trakt. prom. 4, 31-33, Apr 1954

Abstract : Critical review of reports written by different authors, dealing in
 automotive and metallurgical technology.

Institution : Scientific Research Institute of Machine Construction

Submitted :

KOROTONOSHKO, N. I.

USSR/Engineering - Measuring instruments

Card 1/1 : Pub. 12 - 10/16

Authors : Korotonoshko, N. I.

Title : The mechanism of a unilateral-drive odometer

Periodical : Avt. trakt. prom. 6, 27-28, June 1954

Abstract : A unilateral-drive odometer, constructed by the Scientific Automotive Institute, is described. The above mentioned instrument is constructed in such a manner that it registers the distance transversed by a vehicle irregardless of its direction. Illustrations; drawings.

Institution :

Submitted :

KOROTONOSHKO, N.I., kandidat tekhnicheskikh nauk; MAZALOV, N.D., kandidat tekhnicheskikh nauk; TRUSOV, S.M.

Stand testing of one-stage four-wheel hydraulic transmission systems.
Avt.i trakt.prom.no.12:14-17 D '56. (MLRA 10:2)

1. Nauchno-issledovatel'skiy avtomobil'nyy institut.
(Automobiles--Transmission devices)

KOROTONOSHKO, Nikolay Ivanovich
KOROTONOSHKO, Nikolay Ivanovich; CHAMOV, A.N., inzh.red.; LEZHNEVA, Ye.I.,
red., izd-va; MODEL', B.I., tekhn.red.; EL'KIND, V.D., tekhn.red.

[Automobiles for difficult terrain] Avtomobili vysokoi prokhodi-
mosti. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry,
1957. 227 p. (MIRA 11:3)
(Automobiles) (Tractors)

KOROTKINSHKO, N.I., kand.tekhn.nauk

Weight parameters and overall sizes of motor vehicles. Avt.prom.
31 no.4:32-33 Ap '65. (MIRA 18:5)

1. Tsentral'nyy ordena Trudovogo Krasnogo Znani nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.

AUTHOR:

Korotov, A.T. (Khabarovsk)

S/125/61/000/012/006/008
D040/D112

TITLE:

All-position CO₂-shielded welding with 1.6 mm wire

PERIODICAL: Avtomaticheskaya svarka, no. 12, 1961, 61-67

TEXT: The author describes experiments which showed that semiautomatic CO₂ welding of vital carbon- and low-alloy-steel structures with the use of 1.6 mm electrode wire may be successfully applied in all possible welding positions. Hitherto, wire of 1.6 mm and larger diameters could be used only for nonvital structures and in the downhand position, because of the possible appearance of cracks in the craters of the first bead in butt welds, spatter, and the excessive size of the pool. The article gives details of the new techniques developed for successful all-position welding. In the experiments Cr.3 (St.3), Cr.4 (St.4) and Cr.4 (SKhL-4) steels of 12 mm thickness were welded with Sv-08G2SA (Sv-08G2SA) wire, a semiautomatic ПШ-54 (PSH-54) welder, and CO₂ for shielding. A welding nozzle designed by the Khersonskiy sudostroitel'nyy zavod (Kherson Shipbuilding Plant) was used after slight adaptation. A ПС-500 (PS-500) welding transformer was used in all experiments; although the best results were obtained with a ПСМ-1000 (PSM-1000). Use of the latter did not result in a stable welding process when several welders

Card 1/2

1. 001, 1.1. (00000000)

1. 001, 1.1. (00000000) 1. 001, 1.1. (00000000)
1. 001, 1.1. (00000000) 1. 001, 1.1. (00000000)
(Electric - 1000)

KOROTOV, M.G.

The main thing in a correct organization of preventive and routine repair work. Gor.khoz.Mosk.30 no.6:28-29 Je '56. (MIRA 9:9)

1.Upravleniye po ekspluatatsii vysoznykh domov.
(Elevators)

KORNEYEV, Grigoriy Kus'mich, kand.tekhn.nauk; KOROTOV, Mikhail Grigor'yevich, inzh.; MOTSOKEVICH, Iosif Savel'yevich, inzh.; ZHDANOV, Boris Vladimirovich, inzh. [deceased]; BURAGO, M.Ya., inzh., retsentsent; PROZOROV, B.I., inzh., red.; SINOTIN, A.I., inzh., red.isd-va; MOHEL', B.P., tekhn.red.

[Passenger and freight elevators] Liftы passazhirskie i gruzovye.
Moskva, Gos. nauchno-tekhn.isd-vo mashinostroit. lit-ry, 1958.
567 p. (MIRA 12:2)

(Elevators)

CO

72

Utilization of wood high in resin. A. V. Vavulin and S. Ya. Kozlov. *Lesokhim. Prom.* 6, No. 5, 11-15; No. 6, 7-11 (1935).—A pitch wood contg. 8-12% resin should receive a sulfate or NaOH treatment, yielding cellulose and resin soap. If 12-16% resin is present, extn. should precede the above treatment. When the resin content is 16-25%, the wood should be extd., or the resin should be saponifd. and the wood refuse can be used for fuel. A resin content in excess of 25% requires the removal of the resin by pressure.

A. A. Bochtinsk

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1st AND 2nd ORDERS																										3rd AND 4th ORDERS																									
PROCESSES AND PROPERTIES INDEX																																																			
<p>Classification of sulfate lyes. A. V. Gavulin, S. Ya. Korotov and V. A. Lyamin. <i>Leskhim. Prom.</i> 5, No. 1, 107 (1966).—The lye yields acids (as AcOH) 3.00; alcohols (as MeOH) 1.30; ketones (as acetone) 0.44; aldehydes (as HCHO) 0.48, tar 10.80% from dry ashless fuel, gas mist, 1.74 cu. m. per kg. of fuel (consumption: 71.5 of birch bark and 28.5% of lye). An economical combination of the gasification is presented. A. A. Polgorny</p>																																																			
<p>ASD-5LA METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			

2A

Vapor pressure of certain terpenes. G. A. Kuzakov and S. Ya. Kozlov. *J. Applied Chem. (U. S. S. R.)* 10, 312 (1936 French 3181(1937)). The vapor pressures of α -pinene, β -carene (both from the turpentine of *Pinus sylvestris*), camphene (from turpentine), limonene (from *Pinus latifolia* oil) and dipentene (from a terpinoid) at 25 mm Hg (760 mm), and that of turpentine acetate and formate at 25 mm, are tabulated. The data satisfy a linear equation (for the above pressure limits) $\log p = (A/T) + B$, where T is abs. temp., and A and B are constants, having the following values: for α -pinene -2111 and 7.810; β -carene -2208 and 7.860; camphene -2118 and 7.810; limonene -2280 and 7.860; dipentene -2280 and 7.860; turpentine acetate -2704 and 8.002; and turpentine formate -2704 and 8.512. The Sventovidavskii ebulliometer was used. A. A. Pulgany.

CR

vapor-liquid phase equilibrium of binary solutions of some terpenes. G. A. Rudakov and S. Ya. Kozlov. *J. Applied Chem.* (U. S. S. R.) **10**, 419-26 (in French) (1937). The vapor-liquid phase equilibria at 100 mm. for the following binary mixts. were investigated: isoborneol-formate(II)-camphene; (I)-dipentene, isoborneol acetate(II)-camphene; (II)-dipentene; dipentene-camphene, Δ-carene-camphene; dipentene-α-pinene, and Δ-carene-α-pinene, and their equil. curves are plotted. The Sven-toskovskii ebullioscope was used. A. A. Podgorny

ASO-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCESSES AND PROPERTIES INDEX																			
CA										20									
<p>Dyeing wood. S. Ya. Karotkov, N. F. Nysenko, S. I. Nikolaev, V. I. Kropotov, and R. I. Feinbrun. U.S.S.R. 68,637, May 31, 1947. In order to bring out the grain of wood used for surfacing, the wood, having a moisture content of 30-40%, is pressed at about 140° prior to dyeing. M. Hosh</p>																			
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																			
FROM SYNONYM										FROM SYNONYM									
SYNONYM										SYNONYM									
SYNONYM										SYNONYM									

The rectification of materials of the terpene series. S. Va. Korotkov. *Lesmaya Prom.* 7, No. 3, 21-4(1947).— Mixts. of 47-51% isobornyl formate, 22-29% monocyclic terpenes, 4-8% camphenes, and 18-23% polyterpenes are considered. B.p. curves and vapor-liquid equil. curves are presented for binary mixts. of these components, leading up to the calcn. of the height equivalent of theoretical plate for the mps. Marshall Sittig

DEREVYAGIN, A.A. [deceased]; KOROTOV, S.Ya., redaktor; VOLKHOVER, R.S.,
tekhnicheskii redaktor

[Calculations in wood chemistry] Raschety v lesokhimi. Moskva,
Goslesbumizdat. Pt. 3. [Absorption and extraction processes for
extracting acetic acid from aqueous solutions] Absorbtsionnye i
ekstraktsionnye protsessy izvlechenia uksusnoi kisloty iz vodnykh
rastvorov. 1952. 300 p. [Microfilm] (MIRA 7:10)
(Wood--Chemistry) (Acetic acid)

KOROTOV, S.Ya., professor.

Precise graphic method for determining the average amount of residues in periodic rectification. Der.1 lesokhim.prom. 2 no.10:15-16 0 '53.
(MLBA 6:9)

1. Arkhangel'skiy lesotekhnicheskii institut. (Wood distillation)

KOROTOV, S.Ya., professor. (Reviewer)

An inferior textbook: "Chemistry of terpenes and resinous acids.
A textbook for schools of higher learning of the forest and lumber
industry." V.M.Nikitin. Reviewed by S.IA.Korotov. Der.i lesokhim.
prom. 3 no.4:30-31 Ap '54. (MLRA 7:5)
(Nikitin, V.M.) (Gums and resins) (Terpenes)

KOROTOV, S.Ya., professor.

Theory of calculations for "evaporative" columns. Der.1 lesokhim.
prom. 3 no.9:11-14 S '54. (MLRA 7:9)

1. Arkhangel'skiy ordena Trudovogo Krasnogo Znameni lesotekhnicheskii
institut im. V.V.Kuybysheva.
(Gums and resins)

KOROTOV, S.Ya., professor.

A useful book ("Foam method for processing gases and liquids."
M.E.Pozin and others. Reviewed by S.IA.Korotov). Gidroliz.i
lesokhim.prom. 9 no.5:31 '56. (MLRA 9:11)
(Gases) (Liquids)
(Chemical engineering--Apparatus and supplies)
(Pozin, M.E.)

KOROTOV, S.Ya.; VYRODOV, V.A.; TIME, Ye.V.

Recovery of acetic acid from vapor and gas products by means
of hot water. Gidroliz.i lesokhiw.prom. 13 no.6:3-5 '60.
(MIRA 13:9)

1. Vsesoyuznyy zaochnyy lesotekhnicheskiy institut.
(Acetic acid) (Wood--Chemistry)

KOROTOV, S.Ya.; KIPRIANOV, A.I.

Coefficient of friction of a vapor-liquid mixture. *Gidroliz. i
lesokhim.prom.* 15 no.6:9-10 '62. (MIRA 15:9)

1. *Lesotekhnicheskaya akademiya im. S.M.Kirova.*
(Hydrolysis) (Fluid dynamics)

KORYAKIN, Vladimir Ivanovich; KOROTOV, S.Ya., red.; FILIMONOVA, A.I.,
red.izd-va; VDOVINA, V.M., tekhn. red.

[Thermal decomposition of wood] Termicheskoe razlozhenie
drevesiny. Izd.2. perer. i dop. Moskva, Goslesbumizdat,
1962. 293 p. (Wood distillation) (MIRA 16:4)

KOROTOV, S.Ya.; VYRODOV, V.A.; ZHURAVLEV, P.I.

Adoption of the continuous method of saponification of isobornyl formate. *Gidroliz. i lesokhim. prom.* 16 no.4:16-18 '63.

(MIRA 16:7)

1. Vsesoyuznyy zaochnyy lesotekhnicheskii institut (for Korotov, Vyrobov). 2. Gor'kovskiy kanifol'no-terpentinnyy zavod (for Zhuravlev).

(Isoborneal) (Saponification) (Camphor)

KOROTOV, S.Ya.; LIVEROVSKIY, A.A.; KIPRIANOV, A.I.; VYAL'YAK, K.E.

Distillation of pyrogenic wood tar in tubular furnaces.

Gidroliz. i lesokhim. prom. 14 no.8:7-8 '61.

(MIRA 16:11)

1. Leningradskaya lesotekhnicheskaya akademiya im S.M. Kirova
(for Korotov, Liverovskiy, Kiprianov). 2. ~~Slantse~~sepererabaty-
vayushchiy kombinat im. V.I.Lenina (for Vyal'yak).

MAGOMAYEVA, G.I.; KOROTOV, S.Ya.

Phase equilibrium of the three-component system isoborneol
formate-formic acid-water. *Gidroliz. i lesokhim. prom.* 17 no.
5:13-14 '64. (MIRA 17:10)

1. Vsesoyuznyy zaochnyy lesotekhnicheskii Institut (for Magomayeva).
2. Leningradskaya lesotekhnicheskaya akademiya (for Korotov).

GORDIN, L.Yu.; KOROTOV, V.M.

"Tales of the life of the brain." Z.Kosenko, A. Remezova. Reviewed
by L.IU. Gordin, V.M. Korotov. Est. v shkole no.3:86-89 My-Je '54.
(MLRA 7:7)

1. Uchitel' shkoly no.700 g. Moskv (for Gordin) 2. Uchitel'
shkoly no.200 g. Moskv (for Korotov)
(Kosenko, Z.) (Remezova, A.) (Brain)

KOROTOVA, N. A.

PHASE I BOOK EXPLOITATION

SOV/5590

Konferentsiya po poverkhnostnym silam. Moscow, 1960.

Issledovaniya v oblasti poverkhnostnykh sil; sbornik dokladov na konferentsii po poverkhnostnym silam, aprel' 1960 g. (Studies in the Field of Surface Forces; Collection of Reports of the Conference on Surface Forces, Held in April 1960) Moscow, Izd-vo AN SSSR, 1961. 231 p. Errata printed on the inside of back cover. 2500 copies printed.

Sponsoring Agency: Institut fizicheskoy khimii Akademii nauk SSSR.

Resp. Ed.: B. V. Doryagin, Corresponding Member, Academy of Sciences USSR; Editorial Board: N. N. Zakhavayeva, N. A. Krotova, M. M. Kusakov, S. V. Nerpin, P. S. Prokhorov, M. V. Talayev and G. I. Fuks; Ed. of Publishing House: A. L. Bankvitser; Tech. Ed.: Yu. V. Rylina.

PURPOSE: This book is intended for physical chemists.

Card 1/8

42

SOV/5590

Studies in the Field of Surface Forces (Cont.)

COVERAGE: This is a collection of 25 articles in physical chemistry on problems of surface phenomena investigated at or in association with the Laboratory of Surface Phenomena of the Institute of Physical Chemistry of the Academy of Sciences USSR. The first article provides a detailed chronological account of the Laboratory's work from the day of its establishment in 1935 to the present time. The remaining articles discuss general surface force problems, polymer adhesion, surface forces in thin liquid layers, surface phenomena in dispersed systems, and surface forces in aerosols. Names of scientists who have been or are now associated with the Laboratory of Surface Phenomena are listed with references to their past and present associations. Each article is accompanied by references.

TABLE OF CONTENTS:

Zakhavayeva, N. N. Twenty-Five Years of the Laboratory of Surface Phenomena of the IFKhan SSSR (Institute of Physical Chemistry of the Academy of Sciences USSR)

3

Card 2/8

Studies in the Field of Surface Forces (Cont.)

SOV/5590

I. GENERAL PROBLEMS OF SURFACE FORCES

Deryagin, B. V. Surface Forces and Their Effect on the Properties of Heterogenous Systems 11

Kusakov, M. M., and L. I. Mekenitskaya. Investigation of the State of Bound Water in Oil Traps 17

Shcherbakov, L. M. General Theory of Capillary Effects of the Second Order 28

Dukhin, S. S. Surface Forces of a Diffusive Nature Close to Liquid Interfaces 38

II. POLYMER ADHESION

Korotova, N. A., and L. P. Morozova. Investigation of the Adhesive Binding of Polymers by Means of the Luminescence Method 48

Card 3/8

Studies in the Field of Surface Forces (Cont.)

SOV/5590

Voyutskiy, S. S., V. L. Vikula, V. Ye. Gul', and Ho Yün-tsui. Effect of Molecular Weight, Polydispersion, and Polarity of High Polymers on Their Adhesion to High Molecular Substrata

55

Metsik, M. S. Role of Surface Forces in Mica Crystals

66

Smilga, V. P. Double Layer on the Boundary of Solids Characterized by a Donor-Acceptor Bond

76

Krotova, N. A., and L. P. Morozova. Applying Infrared Spectroscopic Methods to Study the Interaction Between an Adhesive and Its Lining (Polymer - Glass)

83

Deryagin, B. V., and I. N. Aleynikova. Measurement of the True Density of a Double Electric Layer at the Metal - Dielectric Boundary of Separation

89

Card 4/8

KOROTOVA, T.

Man above all. Sev. profsoyuzy 6 no.15:40-45 N '58.

(MIRA 11:12)

(Dneprodzerzhinsk--Trade unions)

SIMANOVSKAYA, R.B.; VODZINSKAYA, Z.V.; KOROTOVA, Z.F.

Phosphogypsum and its use in the manufacture of sulfuric acid
and portland cement; laboratory studies. [Trudy] NIUIF no.160:
9-49 '58. (MIRA 12:8)
(Gypsum) (Portland cement) (Sulfuric acid)

PEKELIS, G.B.; KOROTOVTSEVA, I.S.

Technological and economic indexes of peat fuel transportation and
its comparison with the transmission of electric power. Trudy
Inst. energ. AN BSSR no.11:155-166 '60. (MIRA 14:9)
(Peat--Transportation) (Electric power distribution)

KOROTOVSKAYA, N. T., DOTSENKO, T. K. and DANISHEVSKAYA, M. L.

"Sewage from the City of Kuybyshev as a Source of Contamination
of the Volga and Samara Rivers by Helminth Eggs."

Tenth Conference on Parasitological Problems and Diseases with Natural
Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of
Sciences, USSR, Moscow-Leningrad, 1959.

Kuybyshev Institute of Epidemiology, Microbiology and Hygiene

DOTSENKO, T.K.; SURCHAKOV, A.V.; BELYAYEVA, A.M.; KOROTOVSKAYA, N.T.;
GOLUBEYATNIKOV, F.I.; KOZLOVA, M.F.

Use of new insecticides in controlling synanthropic flies
in nonisolated sectors. Med.paraz.i paraz.bol. no.3:355-
359 '62. (MIRA 15:9)

1. Iz Kuybyshevskogo nauchno-issledovatel'skogo instituta
epidemiologii, mikrobiologii i gigiyeny (dir. K.P. Vasil'yev),
Gorodskoy sanitarno-epidemiologicheskoy stantsii (glavnyy
vrach A.A. Galaktionova, zav. parazitologicheskim otdelom
N.T. Korotovskaya) i Gorodskoy dezinfektsionnoy stantsii (zav.
M.F. Kozlova).

(FLIES--EXTERMINATION) (INSECTICIDES)

Country : USSR
 Category : Farm Animals. Q-2
 : Cattle.
 Abs. Jour : Ref Zhur-Biol., No 16, 1958, 74019
 Author : Korotovskikh, F. R.
 Institut. : AS USSR Institute of Biology, Ural Affiliate.
 Title : The Development of Calves of the Tagil'skiy
 : Breed and Changes of Their Blood Composition
 : when Raised in Unheated Premises.
 Orig Pub. : Tr. In-ta biol. Ural'skiy fil. AN SSSR, 1957,
 : vyp. 4, 23-28
 Abstract : The experiment was conducted on 21 calves of
 : which 16 were included into the experimental
 : group and were raised in unheated premises,
 : while 5 calves were in a control group raised
 : in heated premises. All other conditions of
 : raising and feeding of the calves were the
 : same. The calves that were raised in heated
 : premises did not substantially differ from the
 : calves raised in unheated premises with regard
 : to their development and live weight. Some

Card: 1/2

35

SATAROV, Sergey Nikolayevich; GAYDAR, Vsevolod Andreyevich;
KOROTOVSKIY, M., red.

[New developments in the construction of elevators and
granaries] Novoe v stroitel'stve elevatorov i zernoskladov.
Alma-Ata, Kazgosizdat, 1964. 150 p. (MIRA 17:8)

BOK, Ivan Ivanovich, akademik; PARSHIN, Aleksey Vasil'yevich, kand.
geologo-mineral.nauk; KOROTOVSKIY, M.P., red.; ALFEROVA, P.F.,
tekhn.red.

[Mineral resources in Kazakhstan] Poleznye iskopaemye Kazakh-
stana. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1961. 50 p.
(MIRA 14:4)

(Mines and mineral resources)

MUSAKULOV, Talip; ABDRAKHMANOV, A., kand.filolog.nauk, red.;
KOROTOVSKIY, M.P.; AYTMUKHAMBETOVA, S., red.; ROROKINA,
Z.P., tekhn. red.

[Kazakh-Russian dictionary; biology terms] Kazakhsko-russkii
terminologicheskii slovar'; terminy biologii.[By] Talip Musakulov.
Pod obshchei red. A.Abrakhrmanova. Alma-Ata, Izd-vo Akad. nauk
Kazakhskoi SSR, 1962. 161 p. (MIRA 15:7)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut iazykoznanitya.
(Kazakh language--Dictionaries--Russian)
(Biology--Dictionaries)

KUTABAYEV, K.; TOMANOV, M.; ABDRAKHMANOV, A., kand. filol. nauk,
red.; AYTMUKHAMMETOVA, S., red.; KOROTOVSKIY, M.P., red.;
KHUDYAKOV, A.G., tekhn. red.

[Russian-Kazakh dictionary] Russko-Kazakhskii terminologicheski
skii slovar'. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR.
Vol.9. [Terms used in construction and for building materials]
Terminy stroitel'stva i stroitel'nykh materialov. Pod obshchei
red. A.Abrakhmanova. 1962. 162 p. (MIRA 15:7)

1. Akademiya nauk Kazakhskoy SSR. Alma-Ata. Institut iazyko-
znaniya.

(Russian language--Dictionaries--Kazakh)
(Building--Dictionaries)